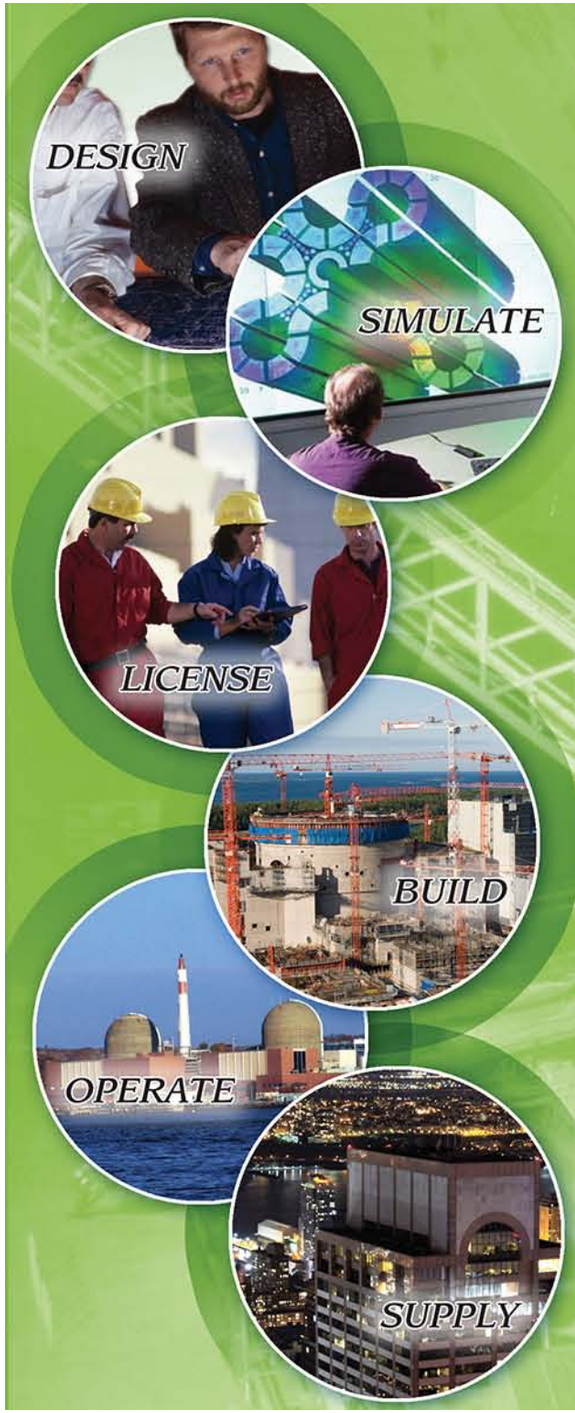



## Nuclear Power Deployment Status

### Early Site Permit (ESP)

Four ESPs issued by NRC.
No ESP applications under NRC review.
Four ESP applications expected in 2010–2012.

### Design Certification (DC)

Two advanced reactor designs certified by NRC.

Four reactor designs undergoing NRC review.

### Combined Construction & Operating License (COL)

Eighteen COL applications submitted to NRC.

Thirteen COL applications under NRC review.

Five COL applications are suspended, pending technology decision or for financial reasons.

### New Nuclear Plant Orders

Nine utilities have ordered large, long-lead nuclear component forgings from three reactor vendors.
Four Engineering, Procurement, and Construction Contracts signed (Vogtle, V.C. Summer, STP, and Progress).
TVA resumed construction of Watts Bar 2; construction permits reinstated for Bellefonte 1 & 2.

**Federal Financial Incentives**

*Nuclear Power Loan Guarantees* — DOE authorized to guarantee $18.5 billion in loans for nuclear power projects.

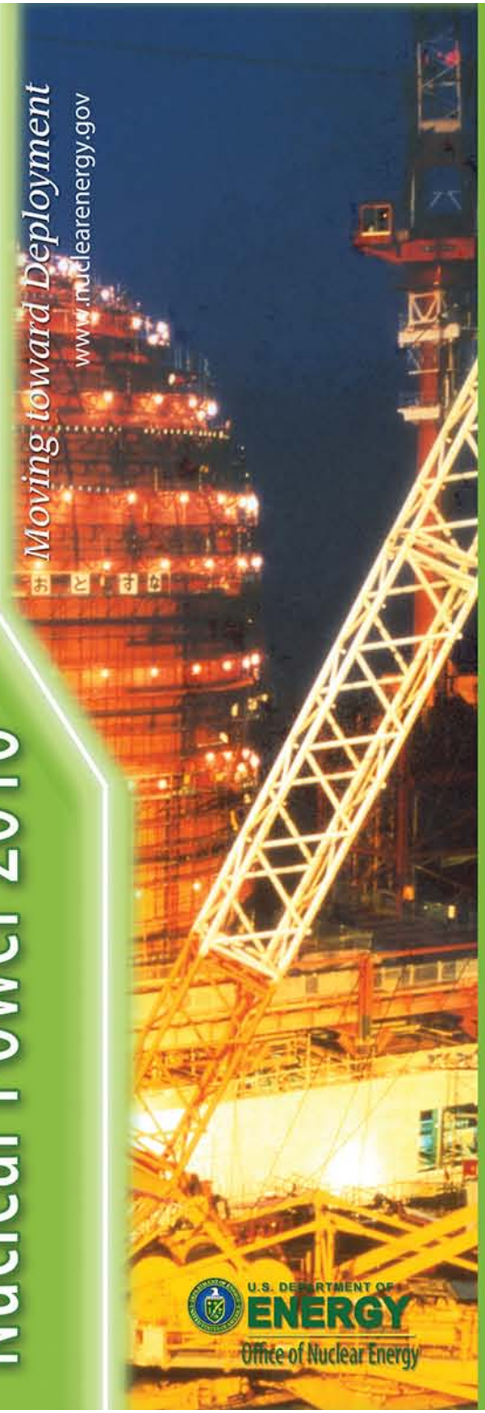
*Standby Support (Risk Insurance)*— DOE authorized to issue insurance to six plants to cover delays in operations attributed to NRC licensing reviews or litigation.

*Production Tax Credits* — 1.8 cents/kw tax credit for the first 6,000 Mwe of deployed nuclear power.

# Nuclear Power 2010

*Moving toward Deployment*

www.nuclearenergy.gov




## Nuclear Power 2010

### *Meeting Tomorrow's Energy Needs*

The **Nuclear Power 2010** (NP 2010) program is a government-industry, 50-50 cost-shared initiative aimed at reducing the technical, regulatory, and institutional barriers to building new nuclear power plants the United States. These new plants are needed to meet an expected increase in electricity demand and to replace older power plants with innovative, more efficient designs.

Authorized by the **Energy Policy Act of 2005**, the NP 2010 program focuses on deployment of **Generation III+ advanced light-water reactor designs** that offer advancements in safety, efficiency, and economics over existing U.S. nuclear plant designs.

***NP 2010 program goals:***

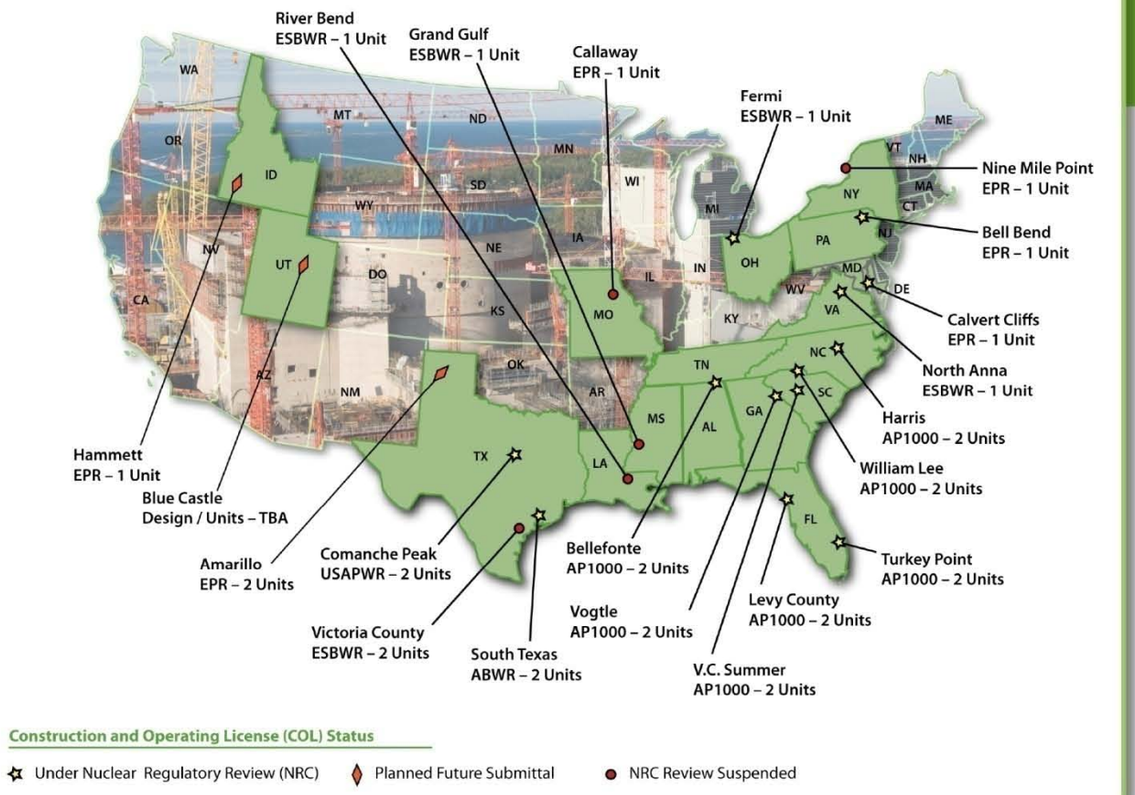
- Develop and bring to market advanced, standardized nuclear plant technologies.
- Demonstrate streamlined Federal regulatory and licensing processes for siting, building, and operating new nuclear power plants.

NP 2010 is managed by the U.S. Department of Energy (DOE) Office of Nuclear Energy (NE).

# Quarterly NEWS

October 2009

## Proposed Sites of New U.S. Commercial Nuclear Power Plants




- The **Advisory Committee on Reactor Safeguards (ACRS)** scheduled meetings for two design-specific subcommittees to review details of the license applications:
  - EPR Subcommittee Sept 9
  - ESBWR Subcommittee Oct 20-22
- **NRC** held public meetings Tuesday, Oct. 6, in Sweetwater, Tennessee, to discuss the Tennessee Valley Authority's Operating License application for a second reactor at Watts Bar.
- **Florida Power and Lights's** COL application for two AP1000 reactors at the Turkey Point site near Homestead, Florida was docketed by NRC on September 8.
- **Southern Nuclear Operating Company** received an ESP and Limited Work Authorization (LWA) for its Vogtle site in Georgia on August 26.

*Updates available at http://www.nuclear.gov*

## Emerging Nuclear Reactor Designs

- **Advanced Passive Pressurized Water Reactor** (AP1000) — Twin units, 1,117 MWe each (Westinghouse International)
- **Advanced Boiling Water Reactor** (ABWR) — 1,356 MWe (General Electric)
- **Economic Simplified Boiling Water Reactor** (ESBWR) — 1,560 MWe (General Electric)
- **United States Advanced Power Reactor** (US-APWR) — 1,700 MWe (Mitsubishi Heavy Industry)
- **United States Evolutionary Power Reactor** (US-EPR) — 1,600 MWe (AREVA)